Suicide

The Youth Risk Behavior Survey includes questions on feeling sad and hopeless, considering suicide, planning suicide attempts, attempting suicide, and medical treatment for injuries due to a suicide attempt.

Overall Trends

Reported levels of suicidal ideation (thoughts and plans) and attempts among Lancaster County teens declined from 1991 to 1999. There was a steady decline in general indicators for suicide over the five biannual survey years (Figure 1).

The percentage of teens who reported seriously considering suicide during the past 12 months declined from 29.3% in 1991 to 18.3% in 1999. This was the largest decline among the four suicide indicators.

During the 1990s there were also strong declines in planned suicide attempts (21.2% to 14.8%) and reports of suicide attempts (11.1% to 8.1%). There was little change in reported treatment for injury, poisoning, or overdose due to a suicide attempt.

New to the survey in 1999 was an indicator of depression. Over one-fifth (22.2%) of teens reported that at some time during the past 12 months they felt so sad or hopeless, almost every day in a row for two weeks or more, that they stopped doing usual activities.

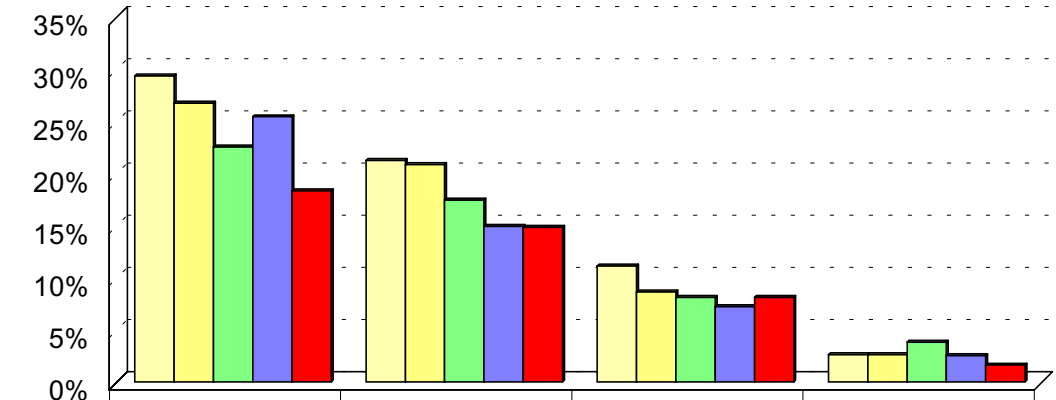
The overall decline in reported suicide, 1991 to 1999, occurred not only in the entire YRBS sample, but also among respondents of different grades, among males as well as females, and white and non-white teens. See the following pages for detail.

Declining rates of suicide ideation (thoughts and plans) in Lancaster County were consistent with declines in the U.S. (1991-1999)[1] and in Nebraska (1993-1997)[2]. Declines in suicide attempts were not as apparent at the state or national level.

1 Centers for Disease Control and Prevention: Youth Risk Behavior Trends Fact Sheet, <http://www.cdc.gov/nccdphp/dash/yrbs/trend.htm>; *MMWR* Surveillance Summaries 1999, 1997, 1995, and 1993.

2 Tables published by Buffalo Beach Company, Lincoln, NE

Figure 1: Suicide Ideation and Attempts*
High School Students, Reported During the Past 12 Months



	Seriously Considered Suicide	Planned Suicide Attempt	Attempted Suicide	Treated For Suicide Attempt
1991	29.3%	21.2%	11.1%	2.6%
1993	26.7%	20.8%	8.6%	2.6%
1995	22.5%	17.4%	8.1%	3.8%
1997	25.4%	14.9%	7.2%	2.5%
1999	18.3%	14.8%	8.1%	1.6%

*Grade Adjusted

Suicide

Differences by Gender

During the 1990s, female teens reported higher levels of depression, suicide thoughts, and suicide plans, than did male students. Reported suicide "consideration" declined for both males and females. However there were significant declines in suicide plans, attempts and treatment among females only (Figs. 2 - 4).

In 1999, female teens were more likely (26.8%) than male teens (17.1%) to report that, at some time during the past 12 months, they felt so sad or hopeless, almost every day in a row for two weeks or more, that they stopped doing usual activities **(Fig. 2)**.

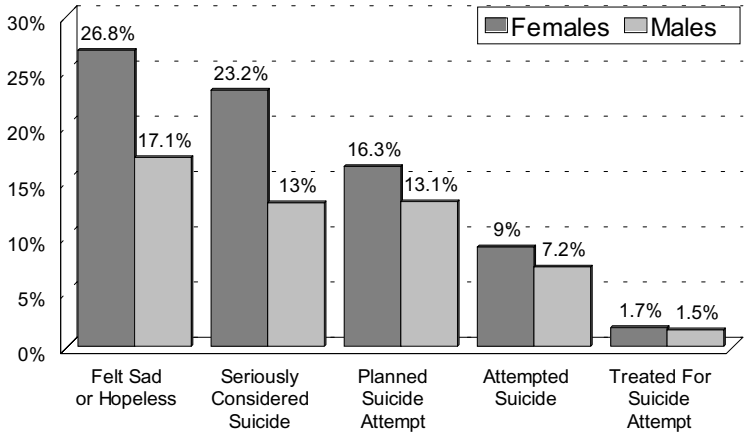
Females were also more likely than males to report that they seriously considered suicide or planned a suicide attempt **(Fig. 2)**. However, there were no statistically significant differences between males and females in reported suicide attempts or medical treatment.

From 1991 to 1999, female teens were consistently more likely than male teens to report having seriously considered or planned a suicide attempt **(Fig. 3)**. There was little difference between males and females in reports of either suicide attempts or injuries requiring medical treatment **(Fig. 4)**.

Reported suicide thoughts ("serious consideration") declined for both males and females from 1991 to 1999. However, only among females were there statistically significant declines in reported suicide plans, attempts and treatment **(Figs. 3 and 4)**.

Figure 2: Suicide Ideation and Attempts*

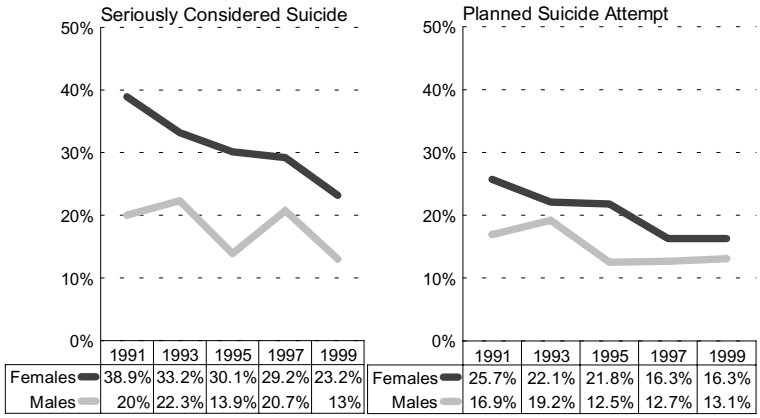
1999 High School Students, Reported During the Past 12 Months



*Grade Adjusted

Figure 3: Suicide Ideation*

High School Students, Reported During the Past 12 Months



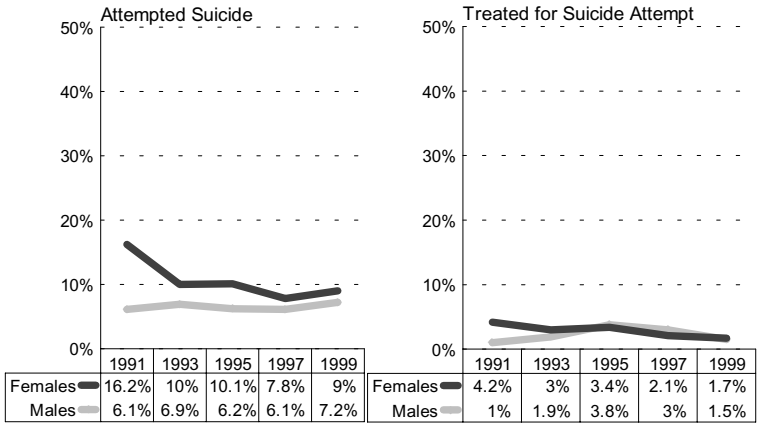
	1991	1993	1995	1997	1999
Females	38.9%	33.2%	30.1%	29.2%	23.2%
Males	20%	22.3%	13.9%	20.7%	13%

	1991	1993	1995	1997	1999
Females	25.7%	22.1%	21.8%	16.3%	16.3%
Males	16.9%	19.2%	12.5%	12.7%	13.1%

*Grade Adjusted

Figure 4: Suicide Attempts and Injuries*

High School Students, Reported During the Past 12 Months



	1991	1993	1995	1997	1999
Females	16.2%	10%	10.1%	7.8%	9%
Males	6.1%	6.9%	6.2%	6.1%	7.2%

	1991	1993	1995	1997	1999
Females	4.2%	3%	3.4%	2.1%	1.7%
Males	1%	1.9%	3.8%	3%	1.5%

*Grade Adjusted

Suicide

Differences by Grade

Over the five biannual Youth Risk Behavior Survey years, 1991 - 1999, reported suicide thoughts, attempts and injuries decreased for teens in individual grades, as well as for all teens. In recent survey years there has been little correlation between grade level and suicide ideation, although teens in younger grades remain more likely to report suicide attempts.

In recent survey years (1997 and 1999) there has been no consistent relationship between grade level and reported prevalence of suicide thoughts, plans and injuries. For example, in 1999 the percentage of teens reporting that they considered suicide within the past 12 months **(Fig. 5)** was not consistently higher in younger grades: 17.5% (9th grade), 18.9% (10th grade), 20.7% (11th grade), 16.0% (12th grade).

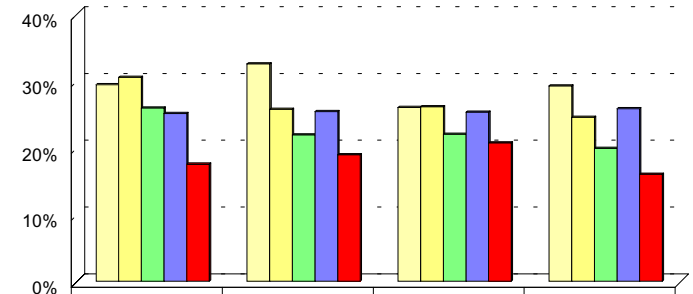
This may represent a change from the earlier 1990s (1991 to 1995), when younger teens (grades 9 and 10) were slightly more likely than older teens (grades 11 and 12) to report seriously considering suicide, planning a suicide attempt, or injuries due to suicide **(Figs. 5, 6 and 8)**. For example, in 1995, the percentage of teens reporting that they planned a suicide attempt in the past 12 months **(Fig. 6)** was highest among 9th graders and decreased with grade level: 21.7% (9th), 19.0% (10th), 15.9% (11th), and 12.6% (12th).

Teens in younger grades have been more likely than those in older grades to report suicide attempts in each of the five biannual survey years **(Fig. 7).** In 1991, 14.3% of 9th graders and 8.3% of 12th graders reported a suicide attempt in the past year. The difference was similar in 1999, with 13.2% of 9th graders and 6.1% of 12th graders reporting an attempt.

Declines in reported suicide ideation and attempts from 1991 to 1999 occurred in all grades **(Figs. 5, 6 and 7).** Among 9th graders, for example, reported suicide consideration declined from 29.4% to 17.5%, and reported suicide plans declined from 22.8% to 13.6%. Among 10th graders, reported suicide plans declined from 24.6% to 11.2% and reported suicide attempts declined from 12.8% to 5.3%.

Figure 5: Suicide Consideration by Grade

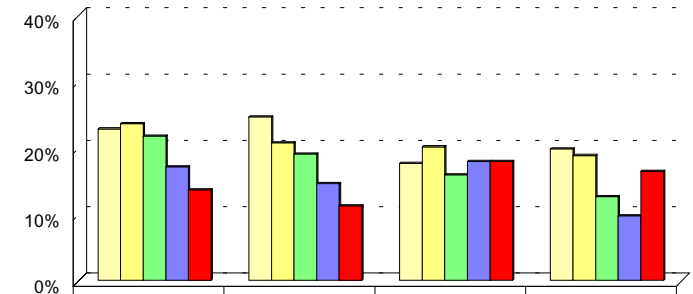
High School Students, Reported During the Past 12 Months



	9th	10th	11th	12th
1991	29.4%	32.5%	26%	29.2%
1993	30.5%	25.7%	26.1%	24.5%
1995	25.9%	21.9%	22%	19.9%
1997	25.1%	25.4%	25.3%	25.8%
1999	17.5%	18.9%	20.7%	16%

Figure 6: Planned Suicide Attempt by Grade

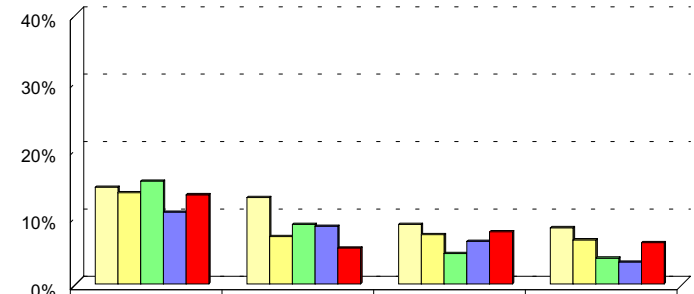
High School Students, Reported During the Past 12 Months



	9th	10th	11th	12th
1991	22.8%	24.6%	17.6%	19.8%
1993	23.6%	20.7%	20.1%	18.8%
1995	21.7%	19%	15.9%	12.6%
1997	17.1%	14.6%	17.9%	9.7%
1999	13.6%	11.2%	17.9%	16.4%

Figure 7: Suicide Attempt by Grade

High School Students, Reported During the Past 12 Months



	9th	10th	11th	12th
1991	14.3%	12.8%	8.8%	8.3%
1993	13.5%	7%	7.3%	6.5%
1995	15.2%	8.8%	4.5%	3.8%
1997	10.6%	8.5%	6.3%	3.2%
1999	13.2%	5.3%	7.7%	6.1%

Differences by Grade

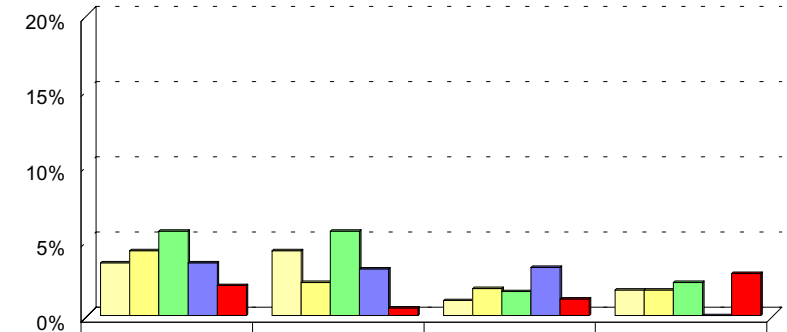
For reported injuries due to suicide attempts, declines overall from 1991 to 1999 occurred only among 9th and 10th graders **(Fig. 8)**.

Older teens were more likely than younger teens to report depression at some time during the past 12 months (new question in 1999). Nearly one-fourth of 12th (24.4%) and 11th (24.5%) graders, along with one-fifth of 10th graders (20.4%) and 9th graders (19.5%) reported that at some time during the past 12 months they felt so sad or hopeless, almost every day in a row for two weeks or more, that they stopped doing some usual activities.

Figure 9 provides a summary graph of suicide indicators in the 1999 YRBS, by grade.

Figure 8: Treated for Suicide Attempt, by Grade

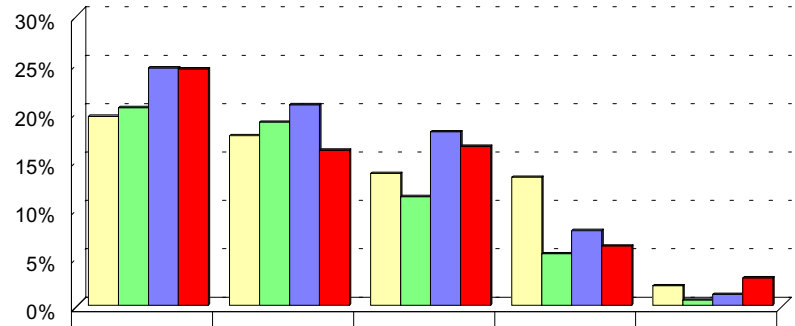
High School Students, Reported During the Past 12 Months



	9th	10th	11th	12th
1991	3.5%	4.3%	1%	1.7%
1993	4.3%	2.2%	1.8%	1.7%
1995	5.6%	5.6%	1.6%	2.2%
1997	3.5%	3.1%	3.2%	0%
1999	2%	0.5%	1.1%	2.8%

Figure 9: Suicide Ideation and Attempts

1999 High School Students, Reported During the Past 12 Months



	Felt Sad or Hopeless	Seriously Considered Suicide	Planned Suicide Attempt	Attempted Suicide	Treated For Suicide Attempt
9th	19.5%	17.5%	13.6%	13.2%	2%
10th	20.4%	18.9%	11.2%	5.3%	0.5%
11th	24.5%	20.7%	17.9%	7.7%	1.1%
12th	24.4%	16%	16.4%	6.1%	2.8%

Differences by Race

In 1999, non-white teens were more likely than white teens to report being depressed, but were not significantly more likely to report suicide thoughts, plans or attempts. All suicide indicators declined among white teens, and reports of suicide thoughts declined among non-white teens (Figs. 10 - 12).

YRBS sample sizes for major race/ethnic groups (Black, Hispanic, American Indian or Asian) were not large enough to reliably compare these groups or examine trends over time. However, selected comparisons were feasible between white teens and those who may be classified as "non-white" -- of minority race or Hispanic ethnicity.

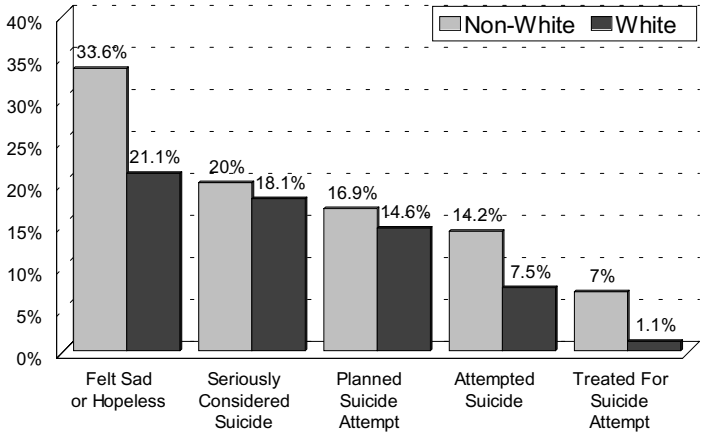
In 1999 non-white teens were more likely (33.6%) than white teens (21.1%) to report that at some time during the past 12 months they felt so sad or hopeless, almost every day in a row for two weeks or more, that they stopped doing some usual activities **(Fig. 10)**. Non-white teens were also more likely than white teens to report being treated for a suicide attempt (7.0% vs. 1.1% in 1999).

However, non-white teens were not more likely than white teens to report that they seriously considered suicide, planned a suicide attempt, or attempted suicide **(Fig. 10)**. There was no statistically significant difference between non-white and white teens on these percentages, even though they appear to be higher for non-white teens in Figure 10.

Among white teens there were declines in reported suicide consideration, plans, attempt, and treatment for suicide injuries **(Figs. 11 and 12)**. Among non-white teens, there was a statisically significant decline only in the percentage of teens reporting that they "seriously considered suicide" **(Fig. 11).**

Figure 10: Suicide Ideation and Attempts*

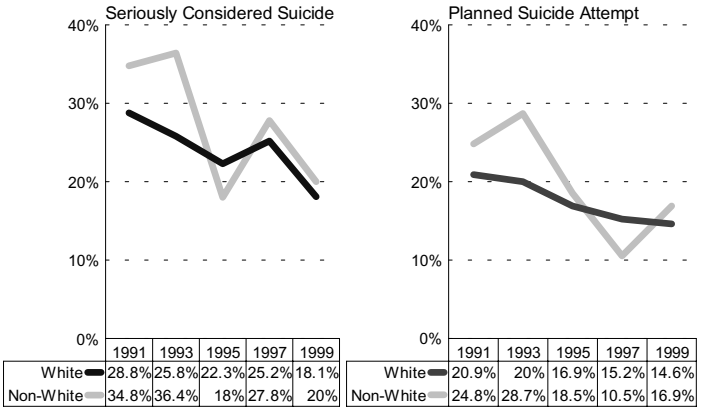
1999 High School Students, Reported During the Past 12 Months



*Grade Adjusted

Figure 11: Suicide Ideation*

High School Students, Reported During the Past 12 Months



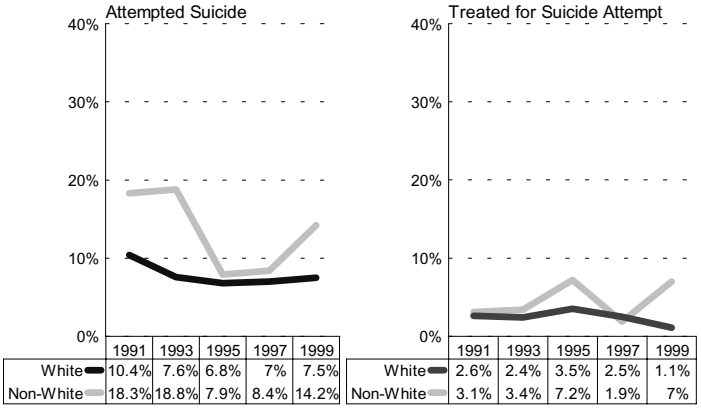
	1991	1993	1995	1997	1999
White	28.8%	25.8%	22.3%	25.2%	18.1%
Non-White	34.8%	36.4%	18%	27.8%	20%

	1991	1993	1995	1997	1999
White	20.9%	20%	16.9%	15.2%	14.6%
Non-White	24.8%	28.7%	18.5%	10.5%	16.9%

*Grade Adjusted

Figure 12: Suicide Attempts and Injuries*

High School Students, Reported During the Past 12 Months



	1991	1993	1995	1997	1999
White	10.4%	7.6%	6.8%	7%	7.5%
Non-White	18.3%	18.8%	7.9%	8.4%	14.2%

	1991	1993	1995	1997	1999
White	2.6%	2.4%	3.5%	2.5%	1.1%
Non-White	3.1%	3.4%	7.2%	1.9%	7%

*Grade Adjusted

Suicide

Health Objectives for the Year 2010: *Reduce the incidence and severity of unintentional and intentional injuries.*

Public Health Discussion

Today's youth are often considered to be in a state of crisis. Research shows that by the time children become teenagers, nearly 20% have already experienced depression at some time in their lives. Approximately half of all adolescents are at moderate risk of engaging in one or more self destructive behaviors, including unsafe sex, teenage pregnancy and child-bearing, drug and alcohol abuse, underachievement, dropping out of or failing school, and delinquent or criminal behavior. Many of these problems are interrelated. Some of them are related to a multitude of outside influences including physical abuse, social violence in the streets and at home, and a media that portrays promiscuous sex, drug abuse, and violence as normal behavior.[1]

Suicide is the ninth leading cause of death in the United States. The risk factors for suicide frequently occur in combination. Scientific research has shown that almost all people who take their own lives have a treatable mental or substance-abuse disorder. The majority have more than one disorder. Suicide remains a complex behavior that requires intensive preventive intervention.[1]

The fact that many teenagers engage in risk behaviors that greatly increase their likelihood of death leads some health experts to believe that such behaviors may, in fact, be suicidal in nature.

"Of significant public health concern are youth attitudes toward risky behaviors, including thoughts of suicide. We care about young people and use this information to impact suicide prevention programming and awareness, assuring that programs exist to improve their quality of life."

Kate Speck, Adolescent and Family Health
Lincoln Medical Education Foundation

Multiple risk factors seem to play a role, e.g. students who engage in substance abuse and/or sexual activity are more likely to attempt suicide.

Parental Roles and Responsibilities:

Three fundamental human needs are critical to survival and healthy development of young people.

First is the need to be a valued member of a group that provides mutual support and caring relationships. Second is the need to become a socially competent individual who has the skills to cope successfully with life. Third is the need to believe in a promising future with real opportunities. Suicide and other self-destructive behaviors often occur when adolescents feel that filling their needs is an unattainable goal. Scientific research has shown that recognition and appropriate treatment of mental and substance-abuse disorders is the most promising way to prevent suicide and suicidal behavior in all age groups.

Community Roles and Responsibilities:

Prevention strategies and recommendations suggested in the Lincoln/Lancaster County Health Department Healthy People 2010 Report include:

1. Promote early access to mental health diagnostic services for children and youth.
2. Develop broad-based school and community programs to address suicide and suicidal behavior as part of a broader focus on mental health, stressing coping skills, substance abuse, and aggressive behavior.
3. Seek to enhance communication between mental health professionals and primary care providers so that concepts of mental health are integrated in the overall health assessment of children and youth.
4. Promote anti-stigma campaigns for mental health services, stressing the value and successes of early intervention.

Policy Makers' Roles and Responsibilities:

Community efforts and individuals can assist greatly in mental health efforts of agencies and health professionals.

1. Encourage equal health insurance benefits for mental health care as with physical health care.
2. Encourage training of school staff to enable them to identify students at risk of suicide, including the training of staff to respond to tragic deaths or other crisis.
3. Encourage training of community members, such as clergy, police, health professionals and youth workers to help identify young people at risk of suicide.
4. Help the community provide adequate crisis centers and hotlines offering referrals to mental health services.
5. Support community programs that build self-esteem and positive self image of youth.
6. Restrict youth access to means of suicide, such as firearms and drugs.

References:

1. Lincoln-Lancaster County Health Department, "Healthy People 2010: Health Objectives for the Year 2010 for Lincoln and Lancaster County Nebraska." January 2000